

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventors: Blaine R. Spady, John D. Heaton,
Assignee: Nanometrics Incorporated
Title: Metrology/Inspection Positioning System
Serial No.: 09/458,123 Filing Date: December 8, 1999
Examiner: Gordon Stock Group Art Unit: 2877
Docket No.: NAN035 US Confirmation No: 8470

COMMISSIONER FOR PATENTS
P.O. Box 145
Alexandria, VA 22313-1450

DECLARATION BY APPLICANT'S ATTORNEY
PURSUANT TO 37 C.F.R. §1.131

Dear Sir:

This Declaration is offered to prove conception and reduction to practice of Claims 1-9 and 15-24 in the above-identified application prior to June 18, 1999, the effective priority date of U.S. Patent No. 6,414,752 by Sullivan et al., (referred to herein as "Sullivan").

Michael J. Halbert declares as follows:

1. I am currently a partner in the firm Silicon Valley Patent Group LLP, 2350 Mission College Boulevard, Suite 360, Santa Clara, California.

2. I was an associate at the firm Skjerven, Morrill, MacPherson, Franklin & Friel LLP, 25 Metro Drive, San Jose, California (referred to herein as "Skjerven") along with David T. Millers. Mr. Millers was responsible for preparing and filing the above-referenced application (the "Application") for Nanometrics Incorporated ("referred to herein as "Nanometrics"). The Application was prepared for Nanometrics, and was assigned attorney docket number "M-7677 US" by Skjerven.

SILICON VALLEY
PATENT GROUP LLP
2350 Mission College Blvd.
Suite 360
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3. I am now responsible for the prosecution of the Application for Nanometrics. Mr. Millers no longer represents Nanometrics.

4. Attached hereto as Exhibit A is a copy of an internal Nanometrics' Disclosure of Invention document that lists Blaine R. Spady and John D. Heaton as inventors and is entitled "Metrology/Inspection positioning system" (hereinafter referred to as "the Disclosure Document"). The Disclosure Document is signed by Messrs. Spady and Heaton, along with two witnesses and is dated prior to June 18, 1999. The Disclosure Document was provided to Skjerven to assist the patent attorney in preparing the Application. Dates in the attached copy of the Disclosure Document have been redacted.

5. As can be seen in Exhibit A, the elements of Claims 1-9 and 15-24 were contemplated at the time of the executing the Disclosure Document. For example, under paragraph 2a, the proposed system included a metrology/imaging/inspection head that moved above the wafer. Paragraph 2f shows that image rotation to compensate for the wafer rotating and finding the edge of the wafer was also contemplated. Paragraph 2g indicates that implementation on a process tool was contemplated.

4. On June 28, 1999, Skjerven opened a file for the Application. The opening of the file is evidenced by a letter attached hereto as Exhibit B.

5. As reflected in the Itemized Service Bill to Nanometrics for the month of July, a copy of which is attached as Exhibit C, Mr. Millers began preparation of the Application on July 8, 1999 and continued until July 14, 1999, at which time he sent the Application to the inventors for review.

6. It is my understanding that between July 14, 1999, and October 15, 1999, the inventors reviewed the Application and prepared their comments for Mr. Millers. As reflected in the Itemized Service Bill to Nanometrics for the month of October, a copy of which is attached as Exhibit D, Mr. Millers met with Mr. Spady on October 15, 1999, regarding the Application.

7. As reflected in the Itemized Service Bill to Nanometrics for the month of November, a copy of which is attached as Exhibit E, Mr. Millers revised the Application and sent another draft of the Application to the inventors for review on November 3, 1999.

8. It is my understanding that between November 3, 1999, and December 6, 1999, the inventors reviewed the Application and prepared their comments for Mr. Millers. As reflected in the Itemized Service Bill to Nanometrics for the month of December, a copy of which is attached as Exhibit F, Mr. Millers met with Mr. Spady on December 6, 1999, regarding the Application and revised the Application. The Application was filed on December 8, 1999, as evidenced by the filing date of the Application.

I assert that all statements made herein on my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Respectfully Submitted,

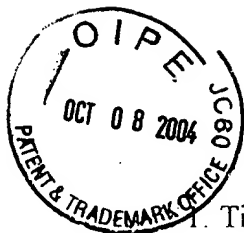


Michael J. Halbert
Attorney for Applicants
Reg. No. 40,633

Dated: 10-8-04

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Disclosure of Invention
NANOmetrics Incorporated

EXHIBIT A

1. Title of Invention

Metrology/Inspection positioning system.

2. Summary of the Invention

a. Abstract

By making a R-theta movement system which includes a metrology/imaging/inspection head that moves above the wafer to be examined, a fast non-contact system can be utilized within a small envelope.

b. Purpose of the invention

To make the smallest – fastest system that takes up the smallest space above a wafer that doesn't move.

c. Advantages of this invention

Small, fast and easy to implement

d. Information on prior art

Prior systems generally move the wafer. Systems that move the optical system usually move only in the X,Y direction.

e) Disadvantages of prior art

Take up lots of space. Have greater mass. Generally slower

f. Novel features of this invention

Imaging system that rotates to compensate for rotated wafer. Ability to find the edge and correct the image.

g. Impact on company business

Could enable implimentation on Process tool with minor impact on process tool design.

Initials: Inventor 1

BS

Inventor 2

X

Witness 1

PK

Witness 2

DK

Date:

3. Conception of Invention

a. Date invention conceived:

b. First oral disclosure:

To: Blaine Spady

By: John Heaton

c. First sketch or drawing

Date: by John Heaton

Location: Research Notebook assigned to

d. First written description

Date: by John Heaton

Location: This document

e. Reduction to practice

Not yet.

4. Work Assignment

Paul Bacchi was given the assignment of building such system.

5. Disclosure

I disclosed it to him on

6. Sale

Initials: Inventor 1 BS Inventor 2 JH Witness 1 JK Witness 2 WTH
Date:

Inventor 1:

Blaine Galy

, California

Date _____

Inventor 2:

[Signature]

, California

Date _____

Witness Declaration

I have read and examined the above and any attached description, and I understand the subject matter described therein.

Joseph F. Kubast

Signature of First Witness

Joseph F. Kubast

Printed Name of First Witness

Date _____

[Signature]

Signature of Second Witness

DUANE C. HOLMES

Printed Name of Second Witness

Date _____

Initials: Inventor 1

BG

Inventor 2

[Signature]

Witness 1

JFK

Witness 2

DCH

Date:

LAW OFFICES OF
SKJERVEN, MORRILL, MACPHERSON, FRANKLIN & FRIEL LLP

25 METRO DRIVE, SUITE 700

SAN JOSE, CALIFORNIA 95110

(408) 453-9200

OFFICES:
AUSTIN, TX
NEWPORT BEACH, CA
SAN FRANCISCO, CA

FACSIMILE: (408) 453-7979

June 28, 1999

Brian Flynn
Nanometrics Incorporated
310 Deguigne Drive
Sunnyvale, CA 94086-3906

Re: Proposed U.S. Patent Application entitled "Metrology/Inspection
Positioning System"

Inventors: Spady, Blaine; Heaton, John

Your Reference: Unknown

Our Reference: M-7677 US

Dear Brian:

This letter is to acknowledge your instructions to open a U.S. patent application file for the above-referenced invention. Thank you for entrusting this matter to us.

This application is identified in our docket system by the reference number stated above. To help us efficiently handle this matter and to avoid confusion, we ask that you include this reference number in all communications to us concerning this application.

It is important at this point that you be aware of several time deadlines which may apply to the filing of this application in the U.S. and elsewhere. The following is a brief explanation of filing deadlines imposed by the U.S. and other countries.

U.S. Statutory Bars

In the U.S., the most important of these deadlines arise from the so-called "statutory bars," which require that an application be filed in the United States Patent and Trademark Office ("USPTO") within one year after the invention is "on sale" or "in public use" in the U.S. or within one year after it is "patented or described in a printed publication" anywhere in the world.

Following this one-year grace period, the application is absolutely barred, and any patent issuing from the application is invalid. Accordingly, we ask you to inform us immediately of any sales, offers for sale, public uses, publications, foreign patent applications filed, or other past events relating to the invention which might have triggered the running of the one-year period and which therefore might give rise to a deadline for filing this application in the U.S.

EXHIBIT B

Nanometrics Incorporated
June 28, 1999
M-7677 US
Page 2

Countries Allowing Priority Claim To U.S. Application

Foreign countries generally do not allow such a grace period, and most bar filing of a patent application as soon as the invention has been disclosed without a confidentiality agreement anywhere in the world. Fortunately, most important industrial countries have joined the Paris Convention of 1883, or have a reciprocal agreement with the United States, which means in effect that these countries will treat the U.S. filing date as the filing date in that country provided that a patent application (for a utility patent) is filed in that country within one year of the U.S. filing date.

Nonetheless, to protect your rights, we must know immediately if you have any plans to disclose your invention, whether in writing, orally, by sale or public use or otherwise, so that we can have your application on file in the U.S. prior to the disclosure. Attachment A to this letter is a current list of countries that have signed the Paris Convention or have a reciprocal agreement with the United States. Countries not listed on Attachment A will not recognize the U.S. filing date of your application.

To effect the foreign filing, certain time-consuming procedural steps will have to be taken; for example, because the filing of a patent application outside the U.S. is considered to be the export of technology, a foreign filing license is required from the USPTO. This can take from a few days to several months unless the invention relates to atomic energy or other critical technologies, in which case the license might be denied. Also, in most cases the application will have to be translated into a foreign language.

Therefore, please let us know immediately if you are interested in filing this application in any country not listed on Attachment A so that we may take this into account in our planning. After the application has been prepared, we will be able to give you an estimate of the cost of filing the application in particular countries. You are not committed to filing in any particular country until you have received our estimate and have given us specific instructions to proceed.

If you have questions on any of these matters, please do not hesitate to call me.

Sincerely yours,



David T. Millers

DTM:ct
Attachment
529847 v1

ATTACHMENT A
PARIS CONVENTION COUNTRIES

Albania	France	Malawi	Slovenia
Algeria	Gabon	Malaysia	Spain
Argentina	Gambia	Mali	Sri Lanka
Armenia	Georgia	Malta	Sudan
Australia	Germany	Mauritania	Suriname
Austria	Ghana	Mauritius	Swaziland
Azerbaijan	Greece	Mexico	Sweden
Bahamas	Grenada	Moldova	Switzerland
Bahrain	Guinea	Monaco	Syria
Bangladesh	Guinea-Bissau	Mongolia	Taiwan*
Barbados	Guyana	Morocco	Tajikistan
Belarus	Haiti	N. Korea	Tanzania
Belgium	Honduras	Netherlands	Tchad
Benin	Hong Kong	New Zealand	Thailand*
Bolivia	Holy See	Nicaragua	The Former Yugoslav
Bosnia and Herzegovina	Hungary	Niger	Republic of Macedonia
Brazil	Iceland	Nigeria	Tobago
Bulgaria	India*	Norway	Togo
Burkina Faso	Indonesia	Panama	Trinidad and
Burundi	Iran	Paraguay	Tunisia
Cameroon	Iraq	Peru	Turkey
Canada	Ireland	Philippines	Turkmenistan
Cen. African Rep.	Israel	Poland	Uganda
Chile	Italy	Portugal	Ukraine
China	Ivory Coast	Republic of Moldova	United Arab Emirates
Colombia	Japan	Republic of S. Africa	United Kingdom
Congo	Jordan	Romania	United States of America
Costo Rica	Kazakhstan	Russian Fed.	Uruguay
Croatia	Kenya	Rwanda	Uzbekistan
Cuba	Kyrgyzstan	S. Korea	Vatican City
Cyprus	Latvia	Saint Kitts and Nevis	Venezuela
Czech Republic	Lebanon	Saint Lucia	Viet Nam
Denmark	Lesotho	Saint Vincent and the	Yugoslavia
Dominican Rep.	Liberia	Grenadines	Zaire
Egypt	Libya	San Marino	Zambia
El Salvador	Liechtenstein	Senegal	Zimbabwe
Equatorial Guinea	Lithuania	Sierra Leone	
Estonia	Luxemburg	Singapore	
Finland	Madagascar	Slovakia	

*Reciprocal agreement with the United States.



Skjerven, Morrill, MacPherson, Franklin & Friel, LLP
25 Metro Drive, Suite 700
San Jose, California 95110
(408) 453-9200

August 1, 1999

Nanometrics Incorporated
Attn: Accounts Payable
310 Deguigne Drive
Sunnyvale, CA 94086-3906

Invoice #: 295420
David T. Millers
Client #: 5976
Matter #: M-7677 US

ITEMIZED SERVICES BILL

REGARDING

Metrology-Inspection
Positioning System

Date	Atty	Description	Hours
07/08/99	DTM	Begin drafting patent application	0.70
07/12/99	DTM	Continue drafting patent application	4.20
07/13/99	DTM	Continue drafting patent application	5.20
07/14/99	DTM	Complete first draft; Send application for inventors' review	2.20

Timekeeper	Rate	Hour	Value
David T. Millers	285.00	12.30	3,505.5
Total Fees		12.30	3,505.5
Total Fees			3,505.5

DISBURSEMENT SUMMARY

Total Disbursements	0.00
TOTAL FEES AND DISBURSEMENTS	3,505.50
LESS RETAINER	0.00
LESS UNAPPLIED	0.00
BALANCE DUE ON INVOICE	3,505.50

EXHIBIT C



Skjerven, Morrill, MacPherson, Franklin & Friel, LLP
25 Metro Drive, Suite 700
San Jose, California 95110
(408) 453-9200

November 1, 1999

Nanometrics Incorporated
Attn: Accounts Payable
310 Deguigne Drive
Sunnyvale, CA 94086-3906

Invoice #: 302625
David T. Millers
Client #: 5976
Matter #: M-7677 US

ITEMIZED SERVICES BILL

REGARDING

Metrology-Inspection
Positioning System

Date	Atty	Description	Hours
10/15/99	DTM	Meet with B. spady at Nanometrics	1.60
Timekeeper		Rate	Hour
David T. Millers		285.00	1.60
Total Fees			1.60
			456.00
Total Fees			456.00

DISBURSEMENT SUMMARY

Total Disbursements	0.00
TOTAL FEES AND DISBURSEMENTS	456.00
LESS RETAINER	0.00
LESS UNAPPLIED	0.00
BALANCE DUE ON INVOICE	456.00

EXHIBIT D



Skjerven, Morrill, MacPherson, Franklin & Friel, LLP
25 Metro Drive, Suite 700
San Jose, California 95110
(408) 453-9200

December 6, 1999

Nanometrics Incorporated
Attn: Accounts Payable
310 Deguigne Drive
Sunnyvale, CA 94086-3906

Invoice #: 304795
David T. Millers
Client #: 5976
Matter #: M-7677 US

ITEMIZED SERVICES BILL

REGARDING

Metrology-Inspection
Positioning System

Date	Atty	Description	Hours
11/03/99	DTM	Review and revise patent application; Send draft for inventors' review	4.00
Timekeeper			
		Rate	Hour
	David T. Millers	285.00	4.00
	Total Fees		4.00
Total Fees			1,140.00

DISBURSEMENT SUMMARY

Patents	10.89
Total	10.89
Total Disbursements	10.89
TOTAL FEES AND DISBURSEMENTS	1,150.89
LESS RETAINER	0.00
LESS UNAPPLIED	0.00
BALANCE DUE ON INVOICE	1,150.89

EXHIBIT E



Skjervén, Morrill, MacPherson, Franklin & Friel, LLP
25 Metro Drive, Suite 700
San Jose, California 95110
(408) 453-9200

January 1, 2000

Nanometrics Incorporated
Attn: Accounts Payable
310 Deguigne Drive
Sunnyvale, CA 94086-3906

Invoice #: 310395
David T. Millers
Client #: 5976
Matter #: M-7677 US

ITEMIZED SERVICES BILL

REGARDING

Metrology-Inspection
Positioning System

Date	Atty	Description	Hours
12/06/99	DTM	Meet with B. Spady; Amend application; Review filing documents for inventor's signature	1.30
12/08/99	ASN	Service charge for preparation of Assignment document	1.00
12/08/99	IDS-20	Service charge to prepare and file an Information Disclosure Statement citing twenty (20) or fewer but more than ten (10) references in compliance with the requirements of the United States Patent and Trademark Office	1.00
12/08/99	DTM	File patent application	0.20

Timekeeper	Rate	Hour	Value
David T. Millers	285.00	1.50	427.5
Standard Service Fee-IDS-20	200.00	1.00	200.0
Standard Service Fee-ASN	25.00	1.00	25.0
Total Fees		3.50	652.5
Total Fees			652.5

DISBURSEMENT SUMMARY

Assignment Recordation	44.00
Express Mail	17.33
Total	61.33

EXHIBIT F